

WHAT IS CLAIMED IS:

1. A digital communication system for communication between a first terminal and a second terminal, the first terminal comprising a spread spectrum modulator configured to spread a transmitted signal, the transmitted signal being spread by a spread factor.
2. A system as claimed in claim 1, wherein the spread factor is in the range of 1 to 999.
3. A system as claimed in claim 1, wherein the spread factor is in the range of 10 to 50.
4. A system as claimed in claim 1, wherein the spread factor is 31.
5. A system as claimed in claim 1, wherein the spread spectrum modulator is selected from one of a direct sequence spread spectrum modulator and a frequency hopping spread spectrum modulator.
6. A system as claimed in claim 1, wherein the second terminal comprises a spread spectrum demodulator.
7. A system as claimed in claim 6, wherein the spread spectrum demodulator is selected from one of a direct sequence spread spectrum demodulator and a frequency hopping spread spectrum demodulator.
8. A system as claimed in claim 5, wherein the direct sequence spread spectrum modulator forms part of a first terminal modem.
9. A system as claimed in claim 8, wherein the first terminal modem comprises at least one of the following: an interface, a microprocessor, a forward error correction encoder, a further modulator, an up converter, a block up converter, and an amplifier.
10. A system as claimed in claim 7, wherein the direct sequence spread spectrum demodulator forms part of a second terminal modem.
11. A system as claimed in claim 10, wherein the second terminal modem comprises at least one of the following: a block converter, a down converter, a microcontroller, and an interface.
12. A system as claimed in claim 8, wherein the first terminal modem is part of a first terminal processing equipment, the first terminal processing equipment comprising at least one of the following: a transmit reject filter, a low noise block filter, a block up converter, an up converter, and an amplifier.

13. A system as claimed in claim 10, wherein the second terminal modem is part of a second terminal processing equipment, the second terminal processing equipment comprising at least one of the following: a transmit reject filter, a block converter, and a microcontroller.

14. A system as claimed in claim 1, wherein the first terminal is a remote terminal and the second terminal is a hub terminal.

15. A method for the reduction of noise relative to a signal, the method comprising:

- (a) at a first terminal, generating a signal to be transmitted;
- (b) at the first terminal, modulating the signal to spread the signal so as to form a spread signal; and
- (c) at the first terminal, transmitting the spread signal.

16. A method as claimed in claim 15, wherein the spread signal is received by a second terminal, the second terminal using a demodulator to de-spread the spread signal and any received signal noise.

17. A method for the reduction of noise relative to a signal, the method comprising:

- (a) at a second terminal, receiving a spread signal; and
- (b) at the second terminal, using a demodulator to de-spread the spread signal and any received signal noise so as to form the signal and to reduce the received signal noise.

18. A method as claimed in claim 17, wherein the spread signal is transmitted by a first terminal, the first terminal modulating a transmitted signal to spread the transmitted signal so as to form the spread signal prior to transmitting the spread signal.

19. A method as claimed in claim 15, wherein the first terminal comprises a spread spectrum modulator configured to spread the transmitted signal, the transmitted signal being spread by a spread factor.

20. A method as claimed in claim 18, wherein the first terminal comprises a spread spectrum modulator configured to spread the transmitted signal, the transmitted signal being spread by a spread factor.

21. A method as claimed in claim 19, wherein the spread factor is in the range of 1 to 999.

22. A method as claimed in claim 19, wherein the spread factor is in the range of 10 to 50.

23. A method as claimed in claim 19, wherein the spread factor is 31.

24. A method as claimed in claim 19, wherein the spread spectrum modulator is selected from one of a direct sequence spread spectrum modulator and a frequency hopping spread spectrum modulator.

25. A method as claimed in claim 20, wherein the spread spectrum modulator is selected from one of a direct sequence spread spectrum modulator and a frequency hopping spread spectrum modulator.

26. A method as claimed in claim 16, wherein the second terminal comprises a spread spectrum demodulator.

27. A method as claimed in claim 26, wherein the spread spectrum demodulator is selected from one of a direct sequence spread spectrum demodulator and a frequency hopping spread spectrum demodulator.

28. A method as claimed in claim 24, wherein the direct sequence spread spectrum modulator forms part of a first terminal modem.

29. A method as claimed in claim 25, wherein the direct sequence spread spectrum modulator forms part of a first terminal modem.

30. A method as claimed in claim 28, wherein the first terminal modem comprises at least one of the following: an interface, a microprocessor, a forward error correction encoder, a further modulator, an up converter, a block up converter, and an amplifier.

31. A method as claimed in claim 26, wherein the spread spectrum demodulator forms part of a second terminal modem.

32. A method as claimed in claim 31, wherein the second terminal modem comprises at least one of the following: a block converter, a down converter, a microcontroller, and an interface.

33. A method as claimed in claim 28, wherein the first terminal modem is part of a first terminal processor.

34. A method as claimed in claim 31, wherein the second terminal modem is part of a second terminal processor.

35. A method as claimed in claim 16, wherein the first terminal is a remote terminal and the second terminal is a hub terminal.

36. A computer readable medium storing a program which performs a method for the reduction of noise relative to a signal, the method comprising:

- (a) at a first terminal, generating a signal to be transmitted;
- (b) at the first terminal, modulating the signal to spread the signal so as to form a spread signal; and
- (c) at the first terminal, transmitting the spread signal.

37. A computer readable medium storing a program which performs a method for the reduction of noise relative to a signal, the method comprising:

- (a) at a second terminal, receiving a spread signal; and
- (b) at the second terminal, demodulating the spread signal including a de-spread of the spread signal and any received signal noise so as to form the signal and to reduce the received signal noise.

38. A method for the reduction of noise relative to a signal, the method comprising:  
at a first terminal, generating a signal to be transmitted;  
at the first terminal, modulating the signal to spread the signal so as to form a spread signal;  
at the first terminal, transmitting the spread signal;  
at a second terminal, receiving the spread signal; and  
at the second terminal, demodulating the spread signal, including a de-spread of the spread signal and any received signal noise so as to form the signal and to reduce the received signal noise.